DOCUMENT RESUME

ED 278 287 HE 019 827

AUTHOR Bengis, Laraine
TITLE College Discovery Prefreshman Summer Program, 1985. Evaluation Report.
INSTITUTION City Univ. of New York, NY. Office of Student Affairs and Special Programs.
PUB DATE Apr 86
NOTE 29p.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Basic Skills; *College Freshmen; College Mathematics; *Developmental Studies Programs; Higher Education; *High Risk Students; Pretests Posttests; Program Effectiveness; Program Evaluation; Reading Instruction; *Remedial Programs; Skill Development; *Summer Programs; Transitional Programs; Writing Instruction
IDENTIFIERS *City University of New York

ABSTRACT

The Prefreshman Summer Program for academically and economically handicapped students at the City University of New York (CUNY) was evaluated in 1985 and compared to previous evaluations. The voluntary, 6-week transitional program provides intensive basic skills instruction, tutoring, counseling, and financial aid to incoming students who fail to achieve proficiency on the CUNY Skills Assessment Tests in reading, writing, and mathematics. Findings include: a completion rate of 92% for the summer program; 94% fall registration rate for summer program completers; a higher fall enrollment rate for program participants than for a comparable group of nonparticipants; and course advancement rates in reading, writing, and mathematics that remained high for the past 4 years, averaging 82%, 57%, and 80%, respectively. Twenty-three percent who had failed to achieve the university-wide minimal passing score on the CUNY Skills Assessment Test in reading passed the posttest. Mathematics pretest to posttest gains remained the most substantial each summer, while the least dramatic gains were made on the post-writing test. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

10-21-86

ED278287

1985 COLLEGE DISCOVERY PRE-FRESHMAN SUMMER PROGRAM

An Evaluation

Including a comparison of results over the past four years.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Office of Student Affairs
& Special Programs
CUNY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

HE 019 827

The City University
of New York
Office of Student Affairs
and Special Programs

BEST COPY AVAILABLE

1985 COLLEGE DISCOVERY PREFRESHMAN SUMMER PROGRAM

EVALUATION REPORT

Laraine Bengis

City University of New York

Office of Student Affairs and Special Programs

April 1986

ACKNOWLEDGEMENTS

I wish to thank Mr. Kim St. Denny for designing and computerizing the graphs, Mr. C.K. Wang for computerizing the data and Mr. Mariano Rodriguez for typing the tables and word-processing the report.

CONTENTS

Acknowledgements ii

Introduction 1

Design and Methodology 4
Limitations of Data 5

Summary of Findings 7

Conclusion 10

References 11

Tables

1. 1985 PFSP Enrollment, Completion and Fall Semester Registration Rates 12

2. Reading Progress: 1985 Summer Course Enrollment, Completion, Fall Course Placement and CUNY Reading Skills Assessment Test Results 14

3. Writing Progress: 1985 Summer Course Enrollment, Completion, Fall Course Placement and CUNY Writing Skills Assessment Test Results 16

4. Mathematics Progress: 1985 Summer Course Enrollment, Completion, Fall Course Placement and CUNY Mathematics Skills Assessment Test Results 18

Figures

1. 1985 PFSP Enrollment, Completion and Fall Registration Rates 13

2. Overall PFSP Enrollment, Completion and Fall Registration Rates Over a Four Year Period: 1982-1985 13

3.1. Reading Progress: 1985 Summer Course Enrollment, Completion and Fall Course Placement 15

3.2. Reading Progress: Mean Pre- and Post-Test Scores on the CRAT 15

4.1. Writing Progress: 1985 Summer Course Enrollment, Completion and Fall Course Placement 17

CONTENTS

4.2. Writing Progress: Mean Pre-and Post-Test Scores on the CWAT 17

5.1. Mathematics Progress: 1985 Summer Course Enrollment, Completion and Fall Course Placement 19

5.2 Mathematics Progress: Mean Pre- and Post-Test Scores on the CMAT 19

6. Progress in Reading, Writing and Mathematics to Higher Level courses in the Fall: 1982-1985 20

7. Increase in Scores From Pre- to Post-Tests in Reading, Writing and Mathematics: 1982-1985 20

8. Pass Rate on the CUNY Post-Skills Assessment Tests in Reading, Writing and Mathematics: 1982-1985 20

INTRODUCTION

Of all the students who enter the City University, College Discovery (CD) students in the community colleges labor under the greatest academic and economic handicaps (See Lavin, Protash, Kramer and Bhouraskar, 1983). Indeed, most of them are the first members of their families to attempt a college education. Too often, they understand little of the hurdles they will have to overcome to reach their goal of attaining a college diploma.

College Discovery, through its Prefreshman Summer Program (PFSP), attempts to bridge the gap between students' high school experiences and the demands of college. The Program (voluntary, but open to all who meet its entrance requirements) provides six weeks of intensive basic skills instruction, tutoring, counseling and financial aid to incoming students who fail to achieve proficiency on the CUNY Skills Assessment Tests in reading, writing, and mathematics. In essence, it is a supportive community that sets out to provide an experience in which students will strengthen both themselves and their basic skills prior to matriculating in the Fall.

Modeled after the SEEK PFSP and launched in the summer of 1982 with 81 students from two campuses, the Program has expanded to include 273 students in seven programs at six colleges (Bronx, Medgar Evers, BMCC, LaGuardia and, this past summer, Kingsborough and Queensborough Community Colleges). By 1986, with the inclusion of Hostos, all community colleges will provide incoming students with a PFSP.

Within a more intimate and closely monitored structure than is possible during the regular academic year, each of the CD programs designs a PFSP to accomplish three common goals which have remained the same over the years: (1) improving the basic skills of prefreshmen who must meet University-wide

standards of competency on the skills assessment tests by the time they are ready to enter the upper divisions of CUNY; (2) reducing the amount of time students spend in remedial courses; and (3) easing the transition from high school or the work place to college.

This past summer, all the programs provided group orientation, individual counseling and tutoring which were integrated to varying degrees with the instructional component. Variation among programs depends on students' needs, successful strategies utilized during the regular academic year and experimentation with innovative techniques. Several programs utilized an interdisciplinary instructional approach in reading and writing, with overlapping concepts, themes and skills instruction. At these campuses instructors from different skills areas coordinated their efforts, planned jointly and shared effective strategies. Other programs adhered to a more traditional apprach. Kingsborough Bilingual Program offered ESL instruction in reading and writing in addition to math and an orientation course. BMCC provided students with a computer literacy course as well as instruction in reading, writing and math.

The Program has also evolved into an educational community for the many administrators, counselors, instructors and tutors who return to it summer after summer. Because the college environment is smaller and more intimate in the summer, it provides faculty with a needed opportunity to explore innovative techniques, exchange ideas and, in general, to develop further as educators. At summer planning workshops held in the spring, Special Programs faculty are given an opportunity to share effective management techniques and approaches in counseling, instruction and tutoring.

The PFSP also provides a framework for ongoing research and evaluation. Since 1982, the Central Office has uniformly collected retention and academic performance data documenting the advances made by students in the Program.

The College Discovery budget provides funds to each of the programs for "testing, retesting and evaluation". This provision has allowed colleges to expand their evaluation efforts by securing the services of outside consultants.

The definition of "progress" is not limited to course advancement or pre/post-test gain alone. We know that the Program has less readily measurable advantages -- such as students' increasing in self-esteem and confidence as learners, the camaraderie that develops between people linked by common struggles and goals, and simply the knowledge that someone cares. Some of the changes can be evidenced immediately upon summer program completion through the use of attitudinal measurements, for example. Other less quantifiable gains may influence subsequent academ ic performance and perhaps make a difference in whether or not a student drops out or graduates. The long-range effects of the PFSP will become evident through follow-up studies which track and compare the academic progress of College Discovery "Summer and No-Summer" groups.

DESIGN AND METHODOLOGY

CUNY evaluates the basic skills proficiency of all entering students by administering the CUNY skills assessment tests in reading[1], writing[2], and mathematics[3]. (The test descriptions below were taken from Baruch College's 1984 PFSP Evaluation Report, p. 8). Students are required to meet University-wide minimal standards of competency or their college's higher standards on the tests in order to enter the upper divisions of CUNY. Students who fail one or more of the tests are placed in corresponding remedial courses designed to strengthen their skills. CD students in this category were invited by their respective colleges to participate in the CD Prefreshman Summer Program. Those who accepted the invitation enrolled in one or more basic skills courses, depending on the number of tests failed and other factors, such as availability of time.

---

[1]The CUNY reading assessment test is the reading comprehension subtest of the Descriptive Test of Language Skills. The test consists of 45 multiple-choice questions on understanding main ideas, understanding direct statements and drawing inferences. (Because the University-wide minimal passing score varies, depending on which of the six test forms are administered, scores were scaled to a common metric).

[2]The CUNY writing assessment test is a formal method for evaluating student writing samples, using holistic rating and scoring techniques. The technique was developed by the Educational Testing Service. (The University-wide minimal passing score is 8 of a possible 12 points).

[3]The CUNY mathematics assessment test is a 40-item multiple choice test of mathematical skills in arithmetic and algebra. The test was created by a CUNY task force. (The University-wide minimal passing score is 25 of a possible 40 points).

To determine progress, students were retested on alternate forms of the CUNY skills assessment tests after completing the summer program. Pre- and post-test scores were recorded on rosters which also included the name of students, social security numbers and information on Fall course placement.

The rosters were submitted by each college to CUNY's Office of Special Programs. They formed the basis for this report. Student data were computerized to facilitate follow-up studies or subsequent academic performance, retention and graduation patterns.

Findings in this report focus on summer completion and Fall registration rates as well as on basic skills achievement, such as pre- to post-test score gains. Where applicable, comparisons are made between present findings and those reported in the three previous evaluation reports.

Limitations of Data

1. Since criteria for student advancement to higher level courses in the Fall differ for each program, the reader is cautioned against comparing course advancement rates between colleges. In most cases, teacher judgment was the final determinant for Fall course placement, based on one or a combination of these factors: (a) a significant gain on the CUNY retest; (b) a passing score on the retest; (c) performance in class or; (d) a student 's chosen major.
2. CUNY Skills Assessment Test results include only those students for whom pre- and post-test scores were available. Because of student absence or teacher judgment a small percentage of students were not post-tested.
3. The interpretation of pre- to post-test score changes should be made with an understanding of how the "statistical regression" phenomenon affects these changes. Scores which fall at the extreme ends of the pre-

test distribution (highest and lowest scores) tend to move toward the mean on the post-test. Thus, for students selected for inclusion in the Program because they had low pre-test scores, statistical regression operates in favor of observing higher post-test scores than would be expected if the improvement was due solely to growth in skills.

4. The University, as mentioned earlier, has established minimal standards of competency on the CUNY basic skills assessment exams. However, some colleges have higher standards and admitted students into the PFSP who met the University's but not the college's standard for competency in basic skills. At Medgar Evers College, for example, the passing score on the writing test is 10 while the University-wide passing score is 8.

SUMMARY OF FINDINGS

Previous evaluations have shown that large numbers of PFSP participants make significant progress in basic skills development. Many increase their scores substantially on the CUNY skills assessment retests and progress to more advanced course work in the Fall. (See Bengis, 1982; 1983; 1984).

This section highlights the most significant findings for the 1985 PFSP. Where appropriate, comparisons are made between present and past findings.

THE COLLEGE DISCOVERY PFSP RETAINS MOST OF ITS PARTICIPANTS

. The 1985 PFSP completion rate of almost 92 percent corroborates past results for three years indicating that students who make the commitment to attend the PFSP complete it. The four year average rate is 92 percent. (See Table 1 and corresponding Figure 1; also Figure 2).

PREFRESHMEN WHO COMPLETE THE PROGRAM CONTINUE THEIR ENROLLMENT AND MATRICULATE AT CITY UNIVERSITY IN THE FALL SEMESTER

. Ninety four percent (94 percent) of the PFSP completers registered in the Fall 1985 semester as CD students. The Fall enrollment rate has averaged 94 percent for four years. (See Figure 2).

. An analysis of CD Fall enrollment patterns for the past four years reveals that the 94 percent enrollment rate for PFSP completers far exceeds the 47 percent rate for all CD allocants.

THE PFSP ACCELERATES THE MOVEMENT OF MANY ENTRY-LEVEL STUDENTS FROM REMEDIAL TO COLLEGE-LEVEL COURSE WORK

. Course advancement rates in reading, writing and math remained high for the past four years, averaging 82 percent, 57 percent and 80 percent, respectively.

. In reading, three-fourths of the students advanced to higher level courses or were exempt from further remediation in the Fall. These findings are consistent with past ones which support the PFSP as an important vehicle for the improvement of reading skills. (See Table 2 and corresponding Figure 3.1; also Figure 6).

. While course advancement rates in writing are considerable, with 58 percent of the student having progressed, they are consistently the lowest of the three basic skills areas.

. In math, 77 percent of the students advanced to more difficult course work or were exempt from further remediation. (See Table 4 and Figure 5.1).

STUDENTS INCREASE THEIR SCORES SUBSTANTIALLY ON THE CUNY POST SKILLS ASSESSMENT TESTS. MANY PASS THE POST-TESTS.

. In reading, the pre- to post-test gain of 2.8 points (from 6 to 8.8) is the same as last year's, but slightly lower than the four year average of 3.2 points. (See Table 2 and Figure 3.2). Specifically, 23 percent of the students who had failed to achieve the University-wide minimal passing score of 12 on the pre-test passed the post-test. Most were exempt from further remediation in

reading while others were required to take advanced reading courses to achieve their college's higher standard for competency.

. Each summer, the least dramatic, although not insignificant, gains are made on the CUNY post-writing test. This may be due, in part, to the fact that writing is an integration of separate skills and requires students to synthesize many elements into an intelligible whole. This past summer, the mean score increase from pre- to post-test was 1.4 point (from 5 to 6.4). A score of 8 is needed to obtain proficiency. Over 30 percent passed the post-test. (See Table 3 and Figure 4.2). Results are consistent with past findings.

. Math pre- to post-test gains remain the most substantial each summer, with an average 6 point gain for the past four years. This year, the post-test gain was 7 points (from a score of 16.9 to 23.9). Over 46 percent of those who failed the pre- passed the post-test. (See Table 4 and Figure 5.2).

t-tests performed on the differences between mean pre- and post-test scores in reading, writing and mathematics showed that the differences in all three instances were highly statistically significant, beyond the .0001 level.

CONCLUSION

The City University's College Discovery Prefreshman Summer Program is proving to be a highly effective environment for strengthening basic skills and introducing college to students who enter the University laboring under the greatest academic and economic handicaps.

This summer's findings corroborate past ones which showed that most of the students complete the six-week program and, when compared to non- PFSP College Discovery allocants, register in the Fall in significantly greater numbers. They improved considerably in furthering the reading, writing and math skills necessary to compete successfully in college.

As a transitional program designed to bridge the gap between students' high school experiences and the demands of college it continues to meet its objectives for the 650 students it has served since 1982.

REFERENCES

1. Bengis, L. College Discovery Prefreshman Summer Program Evaluation Report. New YOrk: Office of Special Programs, City University of New York, 1982, 1983, 1984.

2. Lavin, D.E., Protash W., Kramer R. and Bhouraskar G. Socioeconomic Origins and Educational Background of an Entering Class at CUNY: A Comparison of Regular and Special Programs Students. New York: Office of Institutional Research and Analysis, City University of New York, 1983.

Table 1

1985 PFSP ENROLLMENT, COMPLETION
AND FALL SEMESTER REGISTRATION RATES

	Enrolled	Completed		Registered in Fall (Summer Completers)	
College	N	N	%	N	%
B.M.C.C.	107	101	94.4	98	97.0
Bronx	61	48	78.7	44	91.7
Medgar Evers	23	23	100.0	21	91.3
Kingsboro (CD)	14	12	85.7	12	100.0
Kingsboro (Bil.)	22	22	100.0	18	81.8
LaGuardia	29	28	96.6	26	92.9
Queensboro	17	17	100.0	17	100.0
Total:	273	251	91.9%	236	94.0%

Figure 1: 1985 PFSP ENROLLMENT, COMPLETION AND FALL REGISTRATION RATES

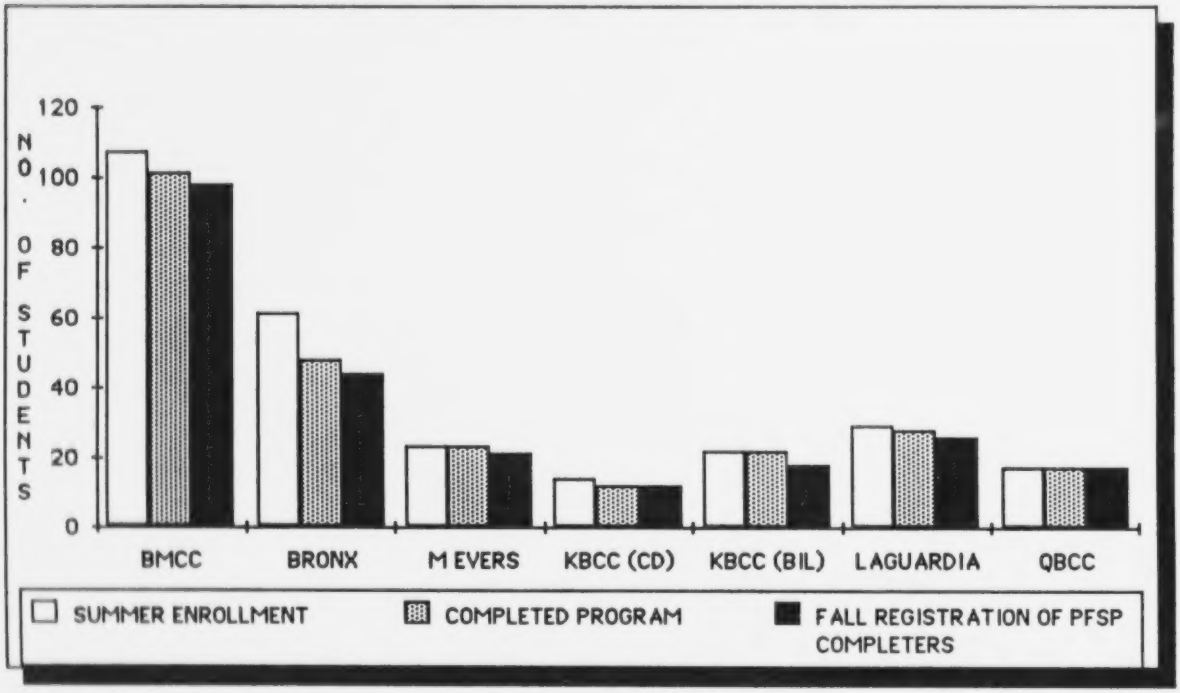


Figure 2: 1985 PFSP ENROLLMENT, COMPLETION AND FALL REGISTRATION RATES OVER A FOUR YEAR PERIOD

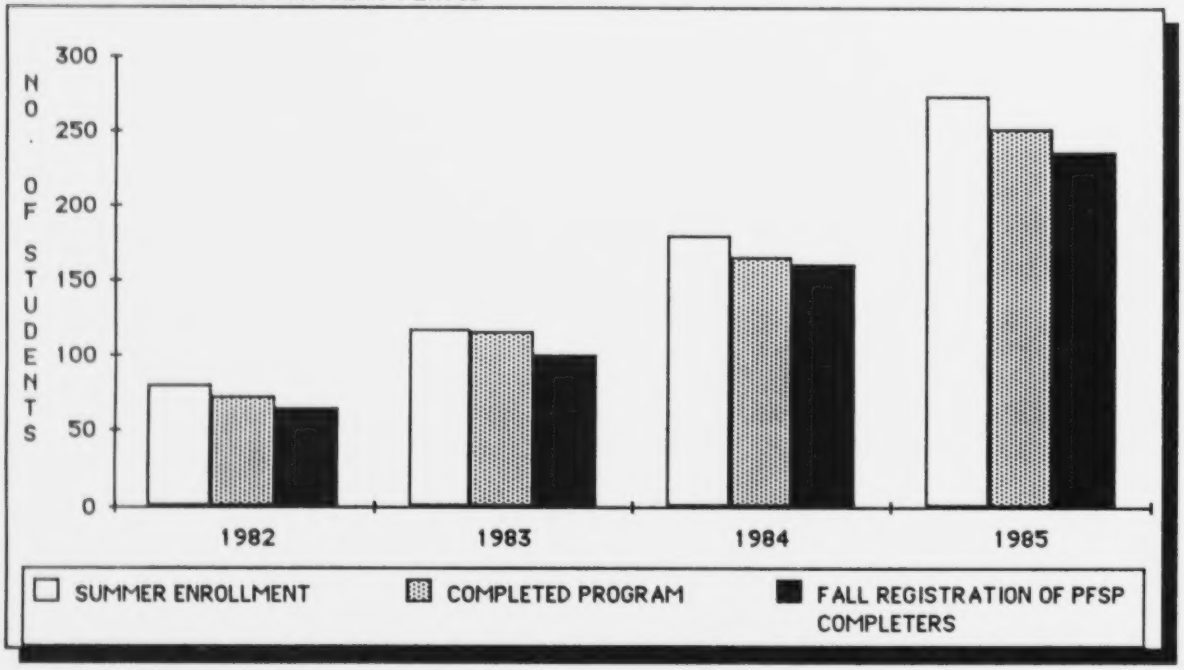


TABLE 2: READING PROGRESS: SUMMER COURSE ENROLLMENT, COMPLETION, FALL COURSE PLACEMENT AND CUNY READING SKILLS ASSESSMENT TEST (CRAT) RESULTS

	Enrollment, Completion, Fall Course Placement					Skills Assessment Test Results[a]					
	Enrolled	Completed		Progressed to Higher Level Course[b]		Pre/ Post Tested	Pre-Test Score	Post-Test Score	Difference	Passed Post-Test[c]	
College	N	N	%	N	%	N	$\bar{X}$	$\bar{X}$	Points	N	%
B.M.C.C.	55	50	90.9	39	78.0	50	5.9	9.8	3.9	9	20.5
Bronx	42	31	73.8	22	71.0	29	5.5	6.5	1.0	3	10.7
Medgar Evers	12	12	100.0	6	50.0	12	5.8	7.7	1.9	3	25.0
Kingsboro (CD)	12	10	83.3	4[d]	80.0	8	5.6	11.5	5.9	5	62.5
Kingsboro (Bil.)	22	22	100.0	(5)[e]	(22.7)	(Not Applicable) -		—	—	—	—
LaGuardia	(No Course)	—	—	—	—	—	—	—	—	—	—
Queensborough	12	12	100.0	11	91.7	12	8.1	9.5	1.4	4	36.4
Total:	133	115	86.5%	82	74.5%	111	6.0.	8.8	2.8[f] (46.7%)	24	23.3%

[a] Because of different test forms scores have been scaled to a common metric. (University-wide minimal passing score is 12 of a possible 25 points).

[b] Criteria for course advancement in the fall differ for each PFSP. Course advancement rates, are therefore, not comparable between colleges.

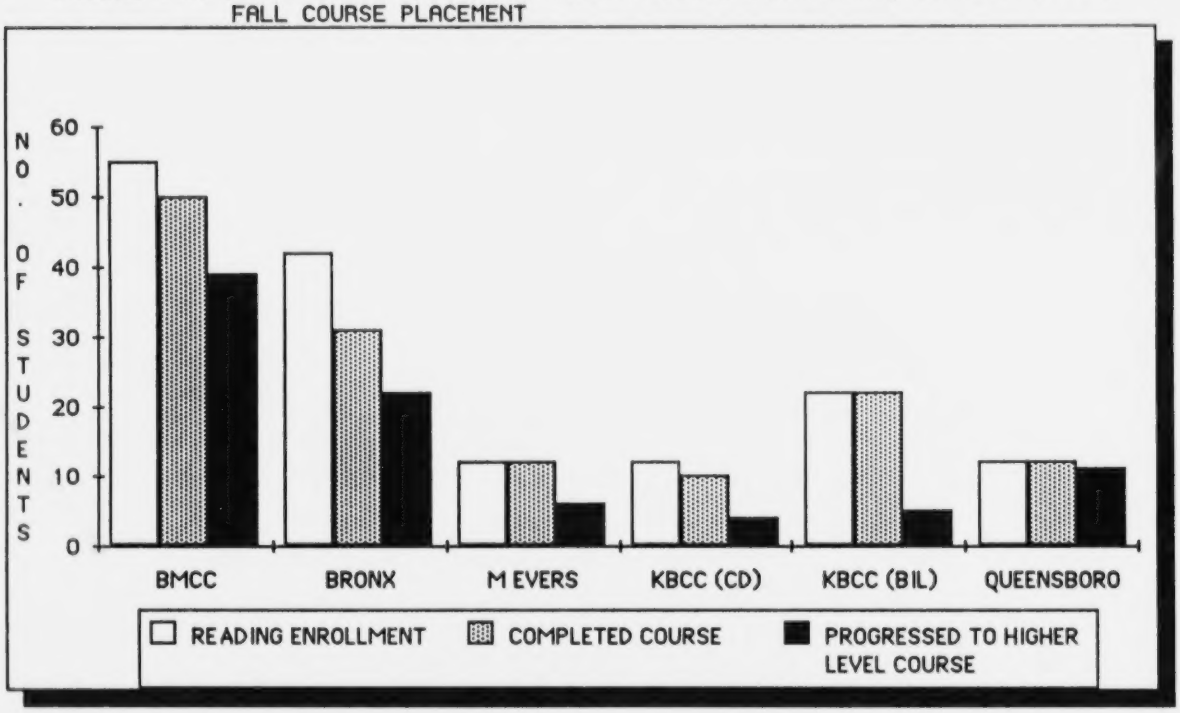
[c] Includes students who passed the post-CRAT from among the 103 who had failed the pre-CRAT.

[d] The base for computing the percentage of students who progressed to higher level courses excludes those who had scored sufficiently high on the pre-CRAT to not require a remedial reading course, but nevertheless took reading in the PFSP.

[e] Course advancement rates represent Fall placement into a coordinated ESL program of reading and writing, rather than reading alone. Studentswere pre- and post-tested on the Metropolitan Reading Test. The mean pre-test score was 20.4 while the post-score was 23.7, a 3.3 point gain.

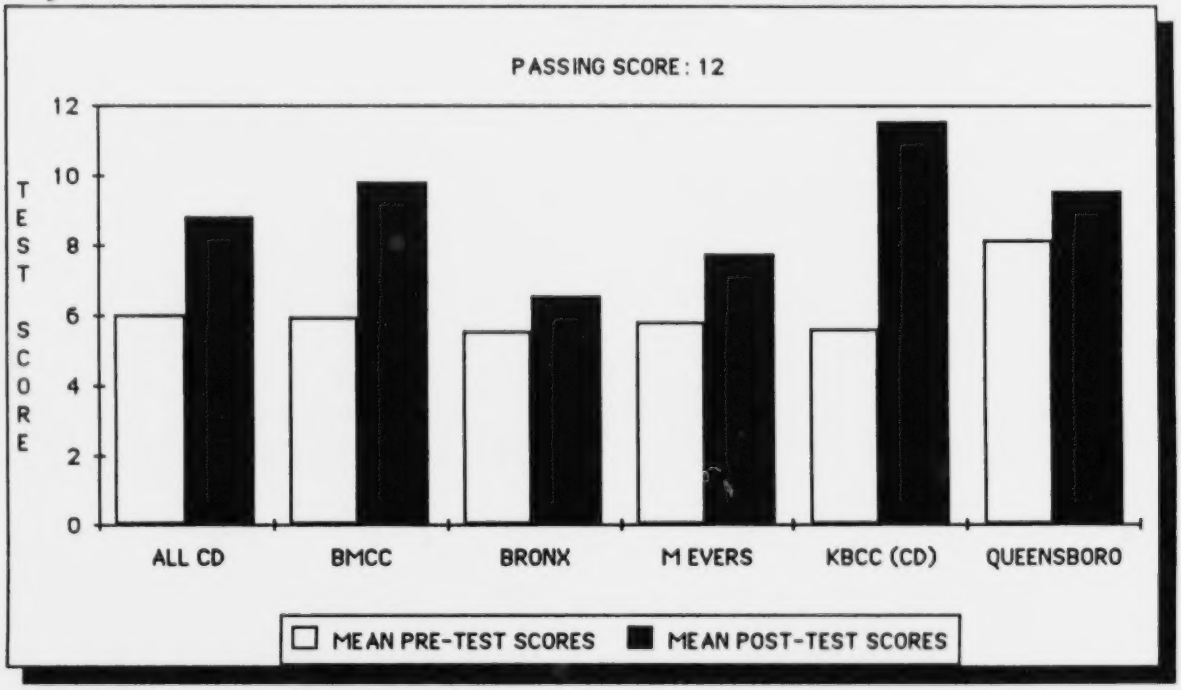
[f] ($t = 7.22$, $p < .0001$, two-tailed test).

FIGURE 3.1: READING PROGRESS: 1985 SUMMER COURSE ENROLLMENT, COMPLETION AND FALL COURSE PLACEMENT



SEE Table 2 for explanatory notes.

Figure 3.2: READING PROGRESS: MEAN PRE AND POST-TEST SCORES ON THE CRAT



SEE Table 2 for explanatory notes.

TABLE 3: WRITING PROGRESS: SUMMER COURSE ENROLLMENT, COMPLETION, FALL COURSE PLACEMENT AND CUNY WRITING SKILLS ASSESSMENT TEST (CWAT) RESULTS

	Enrollment, Completion, Fall Course Placement					Skills Assessment Test Results[a]				
	Enrolled	Completed		Progressed to Higher Level Course[b]		Pre/ Post Tested	Pre-Test Score	Post-Test Score	Difference	Passed Post-Test[c]
College	N	N	%	N	%	N	$\bar{X}$	$\bar{X}$	Points	N %
B.M.C.C.	36	35	97.2	10	28.6	35	5.3	6.2	.9	6 17.1
Bronx	56	43	76.8	27	62.8	43	4.1	5.7	1.6	7 16.3
Medgar Evers	23	23	100.0	10	43.5	22	5.1	6.8	1.7	9 40.9
Kingsboro (CD)	12	10	83.3	4[d]	57.1	8	4.5	6.3	1.8	2 28.6
Kingsboro (Bil.)	22	22	100.0	(5)[e]	(22.7)	(Not Applicable)				
LaGuardia	25	24	96.0	16	66.7	24	5.9	7.7	1.8	16 66.7
Queensboro	17	17	100.0	8	47.1	17	5.5	6.4	.9	5 29.4
Total:	169	152	89.9%	75	50.3%	149	5.0	6.4	1.4[f] (28.0%)	45 30.4%

[a] The University-wide minimal passing score on the CWAT is 8 of a possible 12 points.

[b] Criteria for course advancement in the fall differ for each PFSP. Course advancement rates are, therefore, not comparable between colleges.

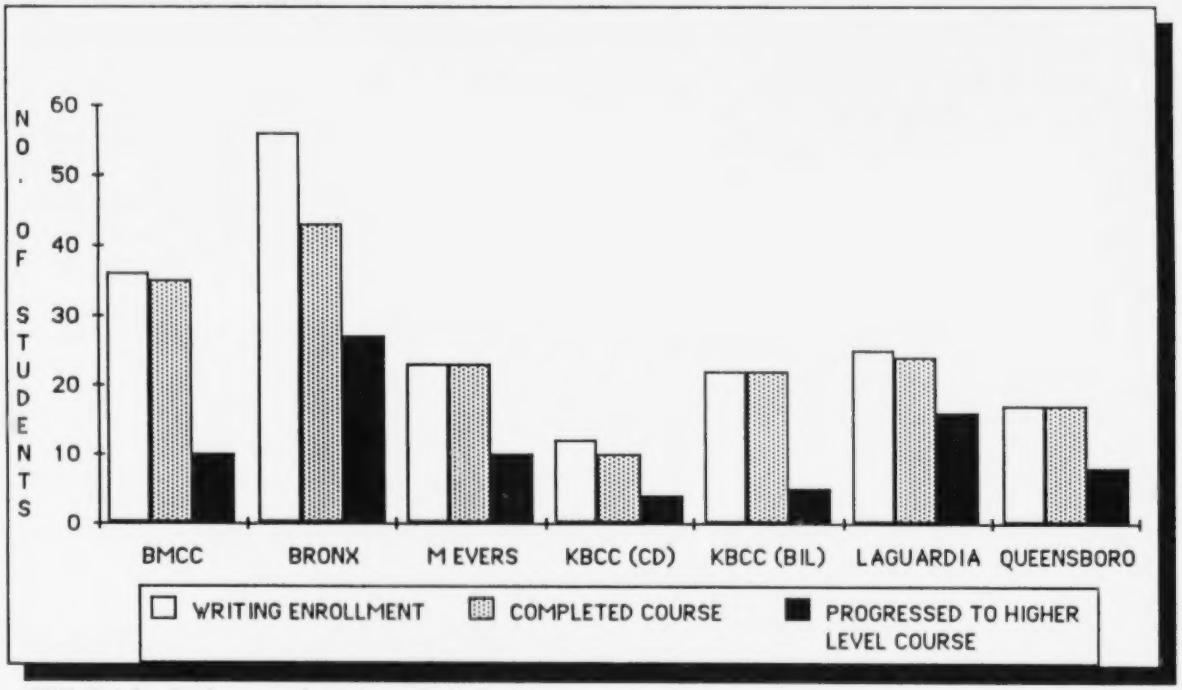
[c] Includes students who passed the post-CWAT from among the 148 who had failed the pre-CWAT.

[d] The base for computing the percentage of students who progressed to higher level courses excludes these who had scored suffienctly high on the pre-CWAT to not require a remedial writing course, but nevertheless, took writing in the PFSP.

[e] Course advancement rates represent Fall placement into a coordinated program of ESL reading and writing, rather than writing alone. Students were pre- and post-tested on the Davis Diagnostic Test of English Proficiency, having attained a pre-score of 78.1 and a post-score of 83.5, a 5.4 point gain.

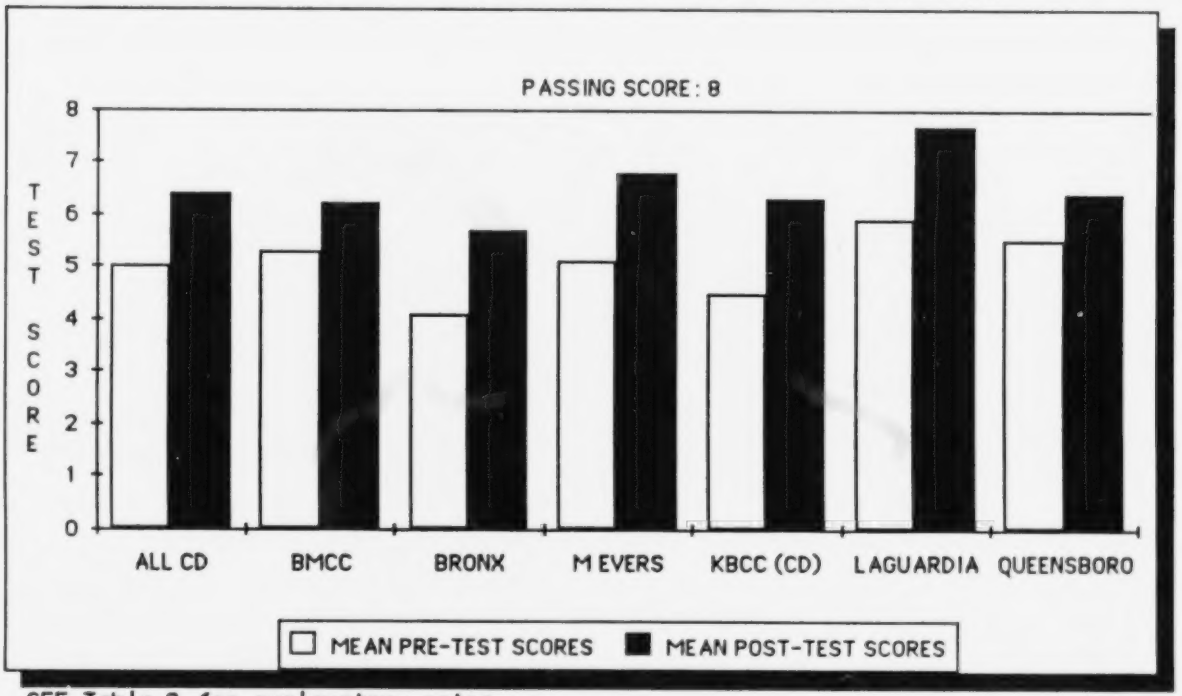
[f] ($t = 11.93$, $p < .0001$, two-tailed test).

FIGURE 4.1: WRITING PROGRESS: 1985 SUMMER COURSE ENROLLMENT, COMPLETION AND FALL COURSE PLACEMENT



SEE Table 3 for explanatory notes.

Figure 4.2: WRITING PROGRESS: MEAN PRE AND POST-TEST SCORES ON THE CWAT



SEE Table 3 for explanatory notes.

TABLE 4: MATHEMATICS PROGRESS: SUMMER COURSE ENROLLMENT, COMPLETION, FALL COURSE PLACEMENT AND CUNY MATHEMATICS SKILLS ASSESSMENT TEST (CMAT) RESULTS

	Enrollment, Completion, Fall Course Placement					Skills Assessment Test Results[a]				
	Enrolled	Completed		Progressed to Higher Level Course[b]		Pre/ Post Tested	Pre-Test Score	Post-Test Score	Difference	Passed Post-Test[c]
College	N	N	%	N	%	N	$\bar{X}$	$\bar{X}$	Points	N %
B.M.C.C.	74	71	95.9	67	94.4	d	—	—	—	— —
Bronx	56	46	82.1	33	71.7	12[e]	22.2	25.9	3.7	4 50.0
Medgar Evers	19	16	84.2	5	31.3	16	14.4	22.9	8.5	5 31.3
Kingsboro (CD)	14	12	85.7	6	75.0	12	16.1	25.8	9.7	5 45.5
Kingsboro (Bil.)	22	22	100.0	12	54.5	22	15.3	21.8	6.5	7 36.8
LaGuardia	24	23	95.8	19	82.6	23	17.1	24.7	7.6	15 65.2
Queensboro	5	5	100.0	5	100.0	5	20.2	23.6	3.4	2 40.0
Total:	214	195	91.1%	147	77.0%	90	16.9	23.9	7.0[f] (41.4%)	38 46.3%

[a] The University-wide minimal passing score on the CMAT is 25 of a possible 40 points.

[b] Criteria for course advancement in the fall differ for each PFSP. Course advancement rates are, therefore, not comparable between colleges.

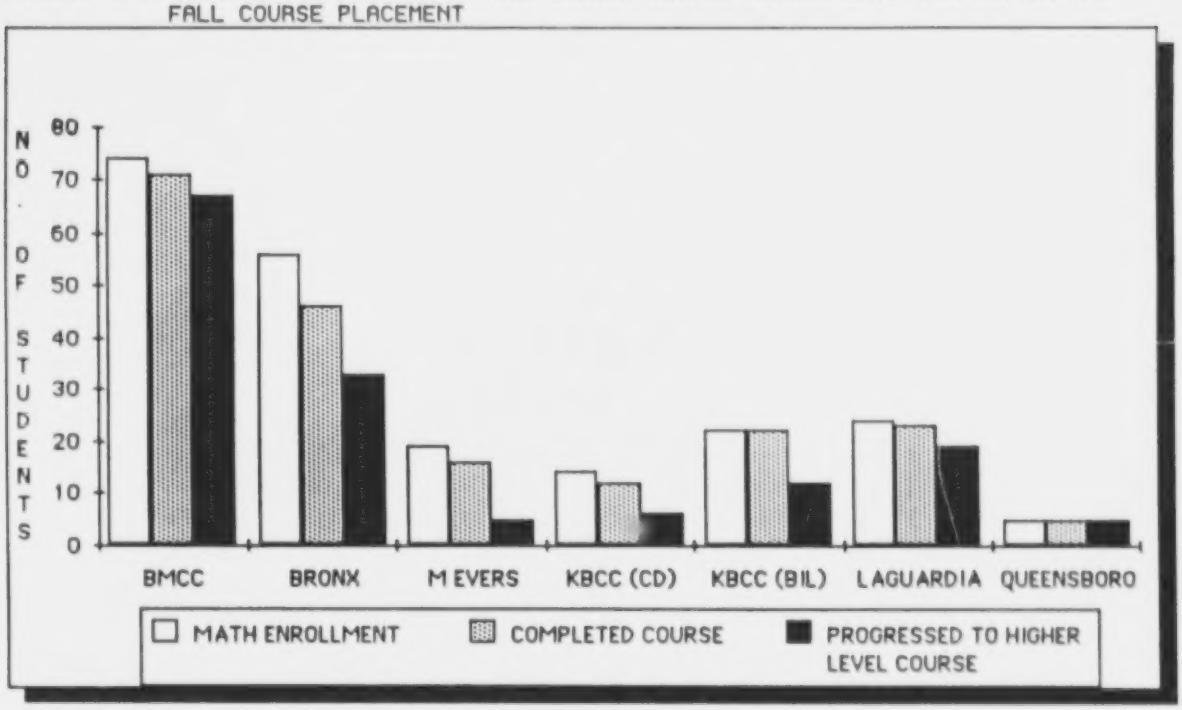
[c] Includes students who passed the post-CMAT from among the 82 who had failed the pre-CMAT.

[d] BMCC students were pre-tested on the CMAT and post-tested on the BMCC Arithmetic Test (BAT). The BAT has been employed at the college since 1973.

[e] Only 12 of 45 Bronx students who were pre- and post-tested took the entire CMAT. For the 33 who took the arithmetic portion only, the mean pre- and post-test scores were 8.3 and 14.8 respectively, a gain of 6.5 points.

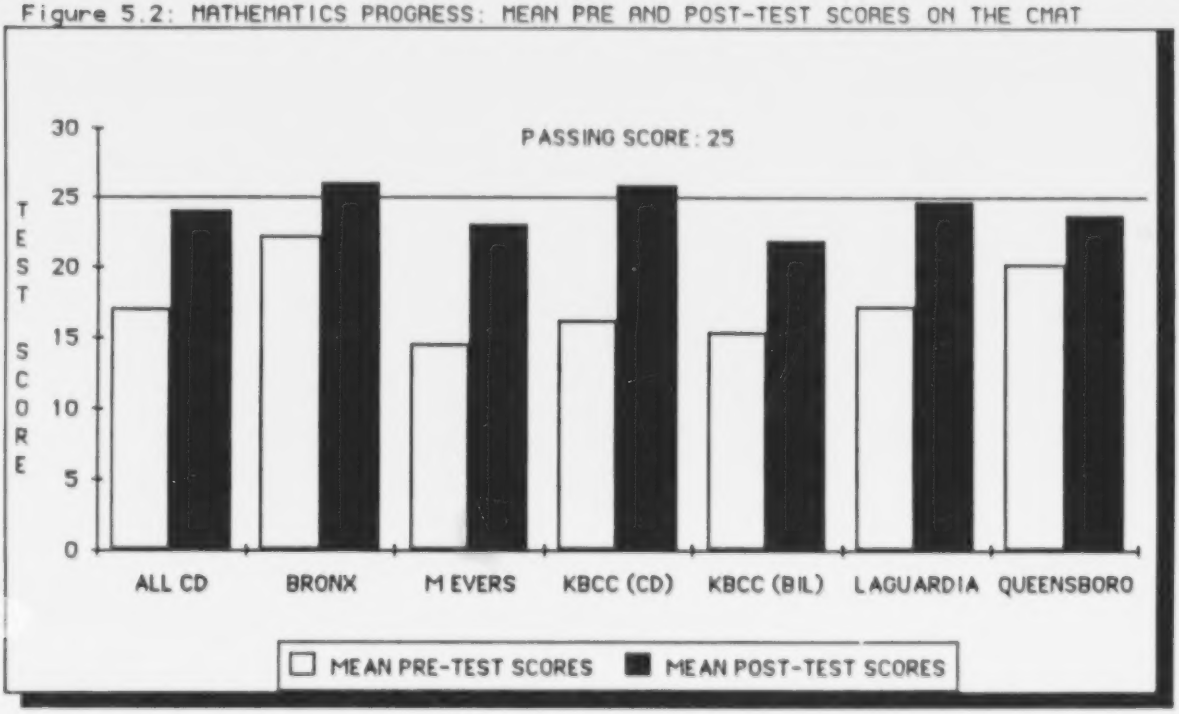
[f] ($t = 12.34$, $p < .0001$, two-tailed test).

FIGURE 5.1: MATHEMATICS PROGRESS: 1985 SUMMER COURSE ENROLLMENT, COMPLETION AND FALL COURSE PLACEMENT



SEE Table 4 for explanatory notes.

Figure 5.2: MATHEMATICS PROGRESS: MEAN PRE AND POST-TEST SCORES ON THE CMAT



SEE Table 4 for explanatory notes.

Figure 6: PROGRESS IN READING, WRITING AND MATHEMATICS TO HIGHER LEVEL COURSES IN THE FALL SEMESTER: 1982-1985

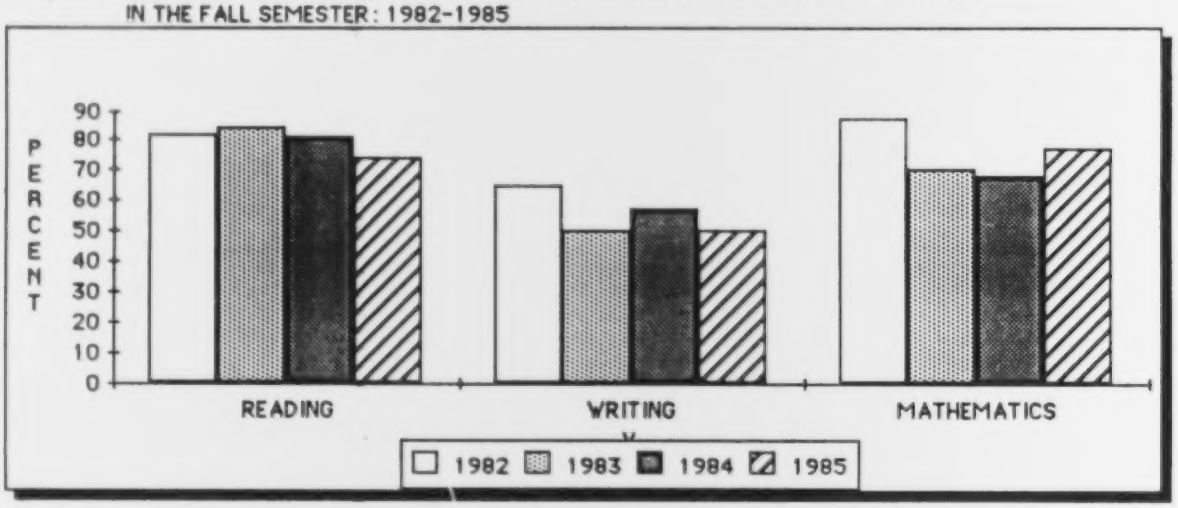
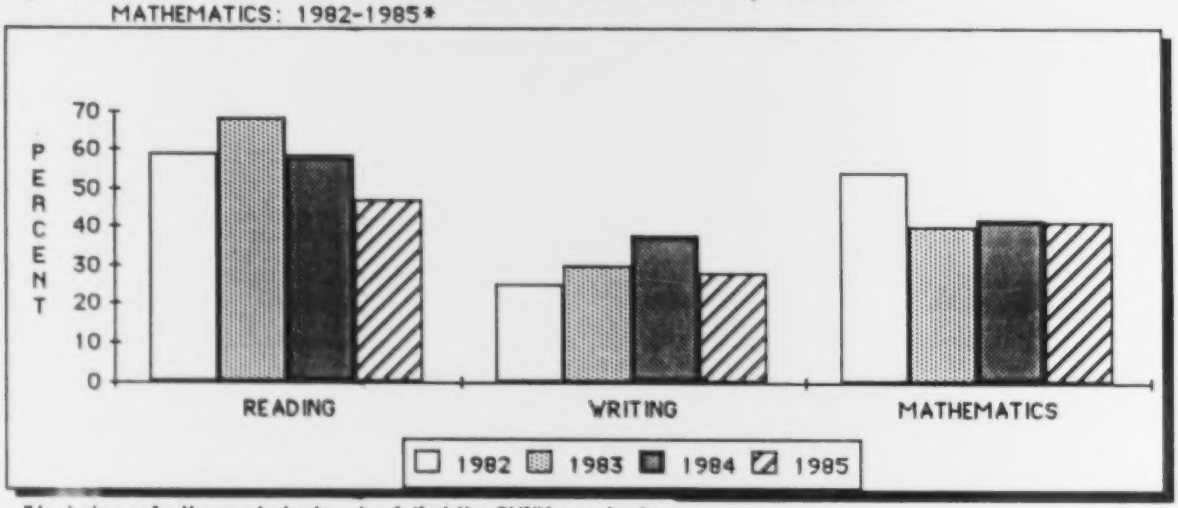
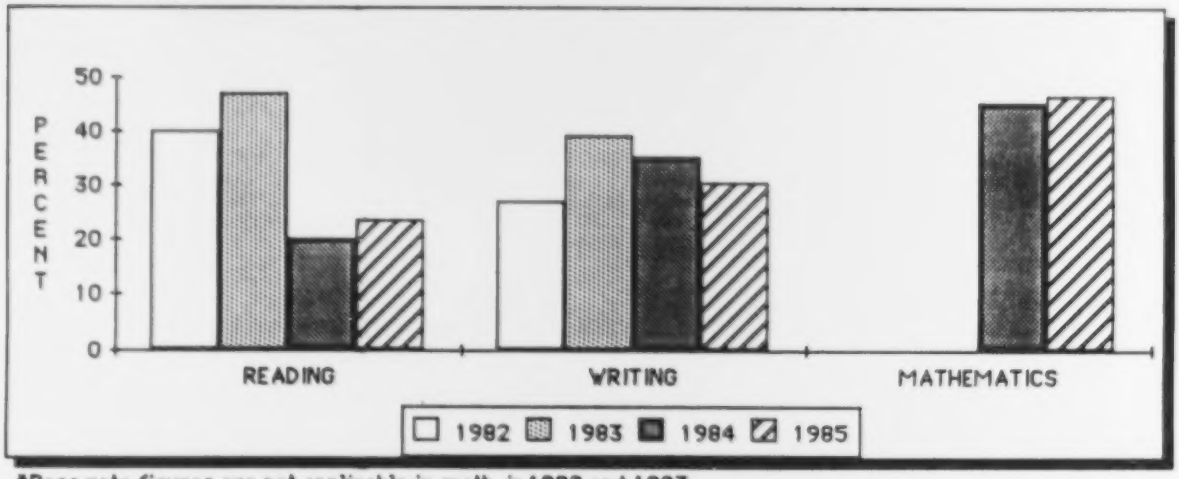


Figure 7: INCREASE IN SCORES FROM PRE TO POST-TESTS IN READING, WRITING AND MATHEMATICS: 1982-1985*



*Includes only those students who failed the CUNY pre-tests

Figure 8: PASS RATES ON THE CUNY POST-SKILLS ASSESSMENT TEST IN READING, WRITING AND MATHEMATICS: 1982-1985



*Pass rate figures are not applicable in math in 1982 and 1983